

**RELATIVE TO THE ESTABLISHMENT OF PLANS FOR
THE PEACEFUL EXPLORATION OF OUTER SPACE**

1693 -4

HEARING

BEFORE THE

**SUBCOMMITTEE ON NATIONAL SECURITY AND
SCIENTIFIC DEVELOPMENTS AFFECTING
FOREIGN POLICY**

OF THE

**COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES**

EIGHTY-FIFTH CONGRESS

SECOND SESSION

ON

H. Con. Res. 326

**A CONCURRENT RESOLUTION RELATIVE TO PLANS
FOR THE PEACEFUL EXPLORATION
OF OUTER SPACE**

MAY 20, 1958

Printed for the use of the Committee on Foreign Affairs



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1958

COMMITTEE ON FOREIGN AFFAIRS

THOMAS S. GORDON, Illinois, *Chairman*

THOMAS E. MORGAN, Pennsylvania
A. S. J. CARNAHAN, Missouri
CLEMENT J. ZABLOCKI, Wisconsin
OMAR BURLESON, Texas
BROOKS HAYS, Arkansas
EDNA F. KELLY, New York
WAYNE L. HAYS, Ohio
ROBERT C. BYRD, West Virginia
ARMISTEAD I. SELDEN, Jr., Alabama
J. L. PILCHER, Georgia
BARRATT O'HARA, Illinois
L. H. FOUNTAIN, North Carolina
DANTE B. FASCELL, Florida
FRANK M. COFFIN, Maine
LEONARD FARBSTEIN, New York
D. S. SAUND, California

ROBERT B. CHIPERFIELD, Illinois
JOHN M. VORYS, Ohio
FRANCES P. BOLTON, Ohio
CHESTER E. MERROW, New Hampshire
WALTER H. JUDT, Minnesota
JAMES G. FULTON, Pennsylvania
DONALD L. JACKSON, California
KARL M. LECOMTE, Iowa
EDMUND P. RADWAN, New York
ALBERT P. MORANO, Connecticut
MARQUERITE STITT CHURCH, Illinois
E. ROSS ADAIR, Indiana
WINSTON L. PROUTY, Vermont
ALVIN M. BENTLEY, Michigan
LAURENCE CURTIS, Massachusetts

BOYD CRAWFORD, *Staff Administrator*
ROY J. BULLOCK, *Staff Consultant*
ALBERT C. F. WESTPHAL, *Staff Consultant*
DUMOND PECK HILL, *Staff Consultant*
FRANKLIN J. SCHUFF, *Staff Consultant*
JUNE NIGH, *Senior Staff Assistant*
WINIFRED G. OSBORNE, *Staff Assistant*
HELEN C. MATTAS, *Staff Assistant*
MYRTIE MELVIN, *Staff Assistant*
HELEN L. HASHACKEN, *Staff Assistant*
MARY LOUISE O'BRIEN, *Staff Assistant*
ROBERT J. BOWEN, *Clerical Assistant*

SUBCOMMITTEE ON NATIONAL SECURITY AND SCIENTIFIC DEVELOPMENTS AFFECTING FOREIGN POLICY

OMAR BURLESON, Texas, *Chairman*

THOMAS E. MORGAN, Pennsylvania
L. H. FOUNTAIN, North Carolina
D. S. SAUND, California

FRANCES P. BOLTON, Ohio
ALBERT P. MORANO, Connecticut
JAMES G. FULTON, Pennsylvania

ROY J. BULLOCK, *Staff Consultant*
JUNE NIGH, *Staff Assistant*

CONTENTS

WITNESSES

	Page
Becker, Hon. Loftus, Legal Adviser, Department of State.....	23
Dechert, Hon. Robert, General Counsel, Department of Defense.....	32
Keating, Hon. Kenneth B., a Representative in Congress from the State of New York.....	15
McCormack, Hon. John W., a Representative in Congress from the State of Massachusetts.....	1

RELATIVE TO THE ESTABLISHMENT OF PLANS FOR THE PEACEFUL EXPLORATION OF OUTER SPACE

TUESDAY, MAY 20, 1958

COMMITTEE ON FOREIGN AFFAIRS,
SUBCOMMITTEE ON NATIONAL SECURITY
AND SCIENTIFIC DEVELOPMENTS AFFECTING FOREIGN POLICY,
Washington, D. C.

The Subcommittee on National Security and Scientific Developments Affecting Foreign Policy met at 10:30 a. m., in room G-3, United States Capitol, Hon. Omar Burleson (chairman of the subcommittee) presiding.

Mr. BURLESON. The subcommittee will come to order. I was hoping we would have a few more members of this subcommittee present. Since they are not, we will proceed.

This is the Subcommittee on National Security and Scientific Developments Affecting Foreign Policy of the Foreign Affairs Committee. We have added that last part of the jurisdiction of this subcommittee, Mr. Leader, in light of recent developments.

By reason of the jurisdiction of this committee, we are to consider House Concurrent Resolution 326, authored by the distinguished majority leader of the House, Mr. McCormack, who is not only an able Representative from the State of Massachusetts, which has greatly influenced our Government since its birth but who is now the chairman of—

Mr. McCORMACK. Select Committee on Astronautics and Space Exploration.

Mr. BURLESON. I see it every morning when I walk by in the corridor but I forget.

Mr. McCORMACK. Briefly called, "Outer Space."

Mr. BURLESON. If we had guests with us this morning who were not familiar with the subject and purpose of this meeting and did not have a copy of the resolution in front of them, we would have it read. I think, however, everyone is aware, generally, of the subject matter.

I repeat, we are very happy to have you, Mr. McCormack, and will be pleased to hear you.

STATEMENT OF HON. JOHN W. McCORMACK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. McCORMACK. Thank you very much, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I have a prepared statement. With your permission, I will include the statement in the record.

Mr. BURLESON. Without objection, it is so ordered.

(The statement referred to is as follows:)

STATEMENT OF HON. JOHN W. MCCORMACK ON HOUSE CONCURRENT RESOLUTION 326

The United States and all its people are at a very troublesome time in history. This is a time, however, when men of courage and of good will have the opportunity, if they but will, for determining something of the course of history. They can through inaction let the Nation drift down the path of recurring crises to the hopeless abyss of total war. But they can also take steps which cumulatively can bring us to a brighter tomorrow when justice and tolerance and good neighborliness will prevail.

We Americans pride ourselves on being practical people. We know that the problems facing the world have long and complex antecedents, and that no simple remedy will right all the ills we face. We know that we must maintain our military strength until effective international agreements can be worked out which will make disarmament with suitable guaranties a reality. But even the problem of war is not solved by plans of inspection and arms limitations alone, helpful as these may be in limiting the danger of a holocaust which would probably destroy civilization as we have known it. No, the real solution to the problems of war lies in men's hearts. So long as people are divided by ideas of intolerance, of superiority and inferiority, and have greed, the world will continue to face threats of war and strife.

I would be the last to advocate overlooking the real problems the world faces and which keep men divided. Questions of political power, of the desire to dominate others, of ideology are important and cannot be wished away. But there are some things that men of good will can do. I am proud of America's record in its relations with the rest of the world over the course of our history. We have championed human liberty, and we have spilled our blood in wars to see that right was maintained. But I feel we can do more than die for these ideals. For even when wars have been necessary, they have rarely solved fundamental problems of distrust, of poverty, of backwardness, and of distress. On the contrary, in an age when there are no victors, all suffer when resort to arms becomes necessary. I am even more proud of America's record in such great endeavors as the Marshall plan which saved Europe from chaos after World War II. I think that when we encourage world trade on a liberal basis through such programs as the reciprocal trade agreements we are doing even more for mankind than when we wage even a righteous war.

I said that we Americans pride ourselves on being a practical people. As one from New England, I come from a part of the country where being practical and developing an intelligent self-interest comes close to being identified with Godliness. America's programs of mutual aid, of reciprocal trade, and other measures are often thought of as generous to the rest of the world. We also recognize them as illustrating a practical American sense of what is good for our own country. We know that we cannot grow rich at the expense of the rest of the world, for we would not be able to live alone to enjoy the fruits of such efforts. We also know that programs of economic and political cooperation with the rest of the world are not a form of charity that add to our saintliness. Rather, they are a practical recognition that the prosperity, indeed the salvation of the United States, depends vitally and indelibly on being part of an ordered world community. This is a community where men live together in peace, harmony, and in mutually supporting endeavors, whether these endeavors are economic, cultural, or technical.

In a very few days, a committee of which I am chairman is going to release a report of some of its recent activities on one of the most important issues before the Nation. We are going to report out a bill for the creation of a national space program. I do not want to anticipate on this occasion the various conclusions to which the deliberations of the House select committee have led. But I will state categorically that I and my colleagues have been totally absorbed for several weeks in an absolutely fascinating subject, one with tremendous implications for our country and for the world.

I feel indeed much as Columbus must have at the time he returned to Europe from his first voyage to the New World. In our times this same feeling must have been experienced by those present when the first chain reaction was started in Fermi's pile at the University of Chicago. This marked the dawn of a new age, the atomic age. But now the phrase, "atomic age" may have to be reviewed to see whether it is not more appropriate to think of this as the dawn of the space age. I think we have an advantage over Columbus, and perhaps over

Fermi and his colleagues. Through the medium of open, public hearings, we have had many of the most learned and the greatest administrative minds in America assess the meaning of the space age for America and the world. This is a time when it is good to be alive. It would be hard to imagine greater challenges than we face.

Let me go back just a little bit into the recent past, and give you some thoughts on how these new conditions came about. Men have learned with increasing success in the last few decades to master the forces of nature and to mold the materials of the world to their own uses. I have heard it said that we have reached a stage where the sum total of human knowledge is doubling every 11 years. Some are frightened by this, but I have faith, and I know you do too. We can and must use this knowledge wisely and for the good of mankind. Certainly this kind of headlong flight into the future gives us enormous powers our forefathers never had. Not only can we eliminate poverty everywhere in the years ahead, but we can make the deserts bloom, and indeed change the climates of various regions of the world. There are some who would declare a moratorium on new inventions and knowledge. As a practical thing, this is out of the question. In the first place, it is not the knowledge which causes the trouble; it is the way we live and what we do with our new powers. But what is more to the point, we have no monopoly in America on the acquiring of knowledge nor on ability and concrete accomplishment. God in his wisdom has endowed men of every race and creed, including our ideological opponents of the Communist world, with certain abilities. And people outside America are using these powers to win for themselves an understanding of the universe. This is an important part of man's fulfillment of his destiny on this earth. We in America have no choice if we are not to be left behind in peace as well as war, but to do our utmost to extend the horizons of our knowledge.

Perhaps this morning I sound philosophical. I have been in the Congress representing my district, and trying to serve the American people for a good long time. I think I have earned the right to philosophize a little bit. But more than that, my committee has been listening to lectures about the universe, and man's place in it which make one both humble and philosophical.

This new age into which we are entering did not spring into being overnight. It was laid on a broad foundation of scientific discovery and study dating back many years.

We in the United States together with all the people of the world were exposed to the brilliant light of the real dawn of the space age when Sputniks I and II went into their globe-girdling orbits. And now there is Sputnik III. Our own scientists have made a gallant effort, and now America has entered the space age, in spirit at least, with its Explorers and Vanguard. We know that the political impact of the Soviet achievements was tremendous, and the Soviet Government lost no time in exploiting space in its war of nerves and in its attempts to intimidate the world with threats of missile warfare. Those who were not intimidated were perhaps at least swayed, and many uncommitted countries began to climb on the Soviet bandwagon—the purported vehicle of the future. What a pitiful beginning for an age which could mean so much.

The International Geophysical Year, conducted outside the strictly normal governmental levels of international cooperation, has been a hopeful sign that augurs for a better spirit among men. True, it has brought with it a rivalry, but of that healthy kind the aim of which is to outdo other teams in speeding scientific discovery, and in making knowledge available to all. It was in this context that the United States planned its Vanguard project for a purely scientific satellite devoted to the purposes of international cooperation. The lifting capacity of the Vanguard, and also of the Explorer which came out of standby to support the original program, is so modest that we have been limited in the amount of instrumentation which can be placed in orbit. But the United States has made its satellite plans in the IGY program available to all the world, indeed to the point where launchings less than completely successful have influenced almost day-by-day our international standing in some parts of the world.

I think it a hopeful sign that the Soviets have also begun the release of some scientific data collected from their satellites. Until they (and we) have time to analyze all the data from the satellites put in orbit we cannot judge the completeness of their cooperation. Clearly they used military rocketry for their projects. They failed to announce, in advance, launching times, and they left obscure the radio frequencies they planned to use in their telemetering. But they have cooperated in making some data available.

The space committee has heard a series of witnesses describe various military uses for space devices. How immediate some of these uses may be is not the important questions. Already space is available for use by intercontinental ballistic missiles whose range and accuracy will soon make them practical weapons for future wars. This is a very grim prospect, gentlemen. The committee learned that these missiles are not the ultimate in delivery capability of destructive power. There will be manned orbital bombers traveling at satellite speeds, and military bases in space, manned and unmanned, which can seek out detailed target information on every part of the globe. This is not fiction. This is the reality of the weapons systems being created today for use tomorrow. Can mankind afford to let such tragic wastes of human ingenuity take place? That would be a miserable waste of the great gifts we have been given. Indeed, it is impractical. If we are practical men, surely we can so order the affairs of the world as to prevent the development of weapons which can without warning destroy most if not all civilization. Not only will our cities and our wealth be destroyed, but also our loved ones. Indeed we may lose the very civilization and culture which have raised us from savagery and given us a chance for the finer things of the spirit.

I do not want to give you the impression that the hearings of the committee disclosed nothing but vistas of foreboding and destruction. An important reason I am here before you today is because the space age, like the nuclear age, has a great potentiality for peace and welfare, both for our people and those of other lands. The development of space will require the cooperation of many nations if its potentialities are to be realized. The concepts of sovereignty over airspaces, and outer space beyond, for example, require international understandings. And what is done of a peaceful nature in space is automatically of benefit to many nations.

Let me make this a little more specific. Weather prediction of high accuracy is coming from the current development of reconnaissance satellites. We took testimony before the committee which made clear that the savings resulting from better forecasts would alone be more than enough to pay for the entire space program. Such weather prediction will be successful only if the data collection by satellite is worldwide. This means that such satellites will also provide good weather reports for all the world. Communications satellites are of necessity also going to be of international interest, because their greatest use is likely to be in long-distance signal transmission. Perhaps international television will not be used in an elevating way. But it could be a great tool for cultural exchange and for international understanding.

In communications, space techniques will also provide a cheap way to transmit the mails to all parts of the globe in a matter of minutes, and new uses not really dreamed of today will without doubt arise.

I think that these illustrations are excellent reasons for our being seriously concerned about the development of space. But there is more than this to explain the need for the resolution which is before your committee.

Gentlemen, if there is anything my committee has learned, it is that the space age is here now; and its further developments are going to come rushing at us. We don't want these developments to be intercontinental ballistic missiles, or even electronic military spies unilaterally placed in the heavens to seek out the vulnerabilities of our country. We don't want America to be the butt of foreign jokes as a faltering domestic program is outraced by one Soviet surprise after another. These are passive reasons, albeit important ones, for a space program devoted to peace. The active reasons lie in the direction of the American tradition of friendly world leadership. We have the opportunity to demonstrate in an effective and practical way that we not only believe in peace, but are willing to take concrete steps with all the nations and people of the world to achieve peace. We want to keep space as an area where mankind can put aside quarrels and there work for the betterment of all men through our understanding of the universe and our mastery of its forces.

In appearing before your committee, I am not doing this by my own whim. Not only am I personally convinced of the vital importance of the resolution before you, but I am here in response to a unanimous directive of all the members of the Select Committee on Astronautics and Space Exploration. The resolution I introduced was reviewed and studied by them. It was also reviewed and approved by the Department of State.

In fact, already, I have spoken for the radio transmitters of the United States Information Agency to carry the message to the world that we individuals who have been studying and drafting legislation for a space program want it dedi-

cated to peace. I hope that the Congress, as the elected representatives of the people, will soon have the opportunity to put into practice these principles by passing a space law that sets up a civilian agency dedicated to peace and prepared to cooperate with all the nations of the world. By such action we shall have much to gain, and other nations will, too. Not only we, but all nations of the world, will have much to gain.

This resolution can fulfill a useful role in signaling the intent which the space bill will carry into law. I urge its most careful and urgent favorable consideration.

In closing, may I make one more observation? We must consider the possibility that the Soviet Union, with its proven capacity to put up large payloads of instrumentation, may at any time decide that it would have nothing to lose and much to gain by making available a part of its lifting capacity to put the instruments of other nations into orbit for them. Moscow could then become the international center to which the young scientists of all the world would travel for advanced studies in rocketry and space. We would welcome any trend in the Soviet Union toward international cooperation. At the same time, I must confess, I would be very much disappointed in our lack of initiative if we came out second best in launching an international program of this nature. No matter how statesmanlike our offer, it would be only "me, too," and it would not, could not, have the far-reaching effect on world opinion that a broadly conceived and wise program of international cooperation, initiated in America, could have.

The resolution is short, simple, and means exactly what it says. I hope you will report it out to the floor so that the Congress can invoke it.

Mr. McCORMACK. House Concurrent Resolution 326, while introduced by me, is, in fact, introduced by each and every individual member of the House Select Committee on Outer Space.

The reason for that is that it originated among the members of the select committee, and a formal action was taken by the select committee, through unanimous vote, to instruct me to introduce the resolution, which I was happy to do, because I think it contains possibilities that, if implemented properly, could be advantageous to world conditions, and when anything is advantageous to world conditions it is advantageous to the national interest of our own country.

The resolution sets forth a great idea. That, you know, is very important at all times under a peaceful world but particularly so in the world today with the worldwide tensions existing.

The world is entering into new discoveries, new knowledge, and it is amazing how much is known as to how far those discoveries and knowledge can go in the great unknown area of what is commonly called outer space; not only what can be done in the way of discoveries that can be made applicable in the immediate future, but 3 to 5 years, 5 to 10 years, 10 to 20 years.

Even though dedicated men who appeared before the committee and testified—they were an inspiration to me—they all said that their knowledge was somewhat limited as to the extent of discoveries—they may not have used that exact language, but that was the substance—even as to the great discoveries that they know can be done, once perfected, they would only then be in a pioneering stage.

This is for the purpose of peace. It is a step to see if, before the nations of the world, particularly the great nations of the world, get into an intense competitive race on the military level, where once that gets developed, difficulty exists on trying to arrive at agreements to restrain it and regulate it for peaceful purposes, it is to try to have negotiations made beforehand, before the fact, to see if, in connection with outer space, some degree of international law can be established for order and for peaceful purposes rather than let unrestrained thought and action take place, with the military necessities dominat-

ing the mind and the military results following, and then the intense military race and the doubting and suspicions and the questions raised later on when attempts are made to try to arrive at agreements that might give to a disturbed world a degree of peace.

We all know the world today and the destructive weapons that exist. As a matter of fact, probably the one salutary effect beneficial to mankind is the very destructiveness of the weapons, the fear of any country using them; yet that fear can never be eliminated until there is some kind of honorable agreement entered into with good faith and with a regard to the world as a whole.

The possibilities of outer space for military purposes, the utilization in so many directions from a military angle, are even more frightful than the terrible weapons of destruction that we now know exist and which, within a very short time, will be perfected so that they could carry out their message of destruction if those who control them on either side undertake to do so, or even if they got beyond control in the hands of one who is careless or who heedlessly might do something that could precipitate a world condition.

You have heard me say on the floor of the House the only level upon which we can deal with a certain nation is on the law of self-preservation. I have felt that for many years, until they change their intent of world revolution and the repudiation of the announced intention of world communism.

We have to be powerfully strong. Military strength is not our national objective; it is a means to a national objective. In case of attack it is necessary that we preserve ourselves. Any nation has to do that. We have to do it. In peacetime, under ordinary conditions, under conditions even as today, military strength is necessary, but we want to use it as a means to an end, that end being a peaceful world in which human beings can live with some assurance of leading normal lives in accordance with their own culture and their own desires.

This resolution represents a great idea. It simply says before the nations of the world get into this competitive race, highly competitive race for military purposes and supremacy and advantage, before we throw into this outer space the contest within the military, the offensive weapons and defensive weapons, and so forth, that efforts be made for the nations of the world to try to enter into an agreement to restrain that, and to try to utilize the benefits that flow from these outer-space discoveries for the benefit of mankind and not for the destruction of mankind.

That is the thought in the mind of every member of the House Select Committee on Outer Space in taking the action it did. Every member is just as much an introducer of this resolution as I am. I am proud to do it, myself, but, for the others, I am their agent and representative. They are just as much a part of it as I am, Democrats and Republicans.

I want to say, Mr. Chairman, that we have sat for weeks, morning and afternoon, and we have sat in executive session for nearly 2 weeks now, isn't it, Congressman Keating? There has not been one dissenting voice.

It has been a great pleasure to act as the chairman of that committee and to notice the great capacity of each and every one of the members.

Coming back to the resolution, I read with pleasure last night's paper, and I have before me the New York Times which carried the news item of a speech of the Secretary General of the United Nations, the Honorable Dag Hammarskjöld. You would think he had read this resolution. I assume he has.

If that is so, then the House select committee feels quite honored that he, or anyone else who feels the same way, should follow the course outlined in House Concurrent Resolution 265.

After the committee action, and to be careful, because we want in the world of today to work in that broad and united way which is for the national interest of our country and in the best interests of our people, I took it up with the State Department.

I wouldn't want to have a resolution introduced and not have them support our position, because it wouldn't do any good where the national interest is concerned. What is needed is teamwork, not Democrats and Republicans; teamwork on the part of Americans should be engaged in and carried out. It is vitally necessary.

So, it was with that thought, I told the members of the select committee what I was going to do and they thoroughly agreed with me, that I took the matter up with the State Department. They considered it for several days; made some changes, not in substance or purpose, but in language which more clearly expressed, from the State Department angle, their thoughts and their views.

I will leave it that way; will let the representative of the State Department follow and express the Department's views, because, beyond that, I wouldn't want to speak for the State Department, except to say that the State Department was fully consulted. As far as I know, they are in favor of it, because I introduced the resolution after a representative of the State Department called to see me and after I reported back to the members of the House select committee.

There are many questions involved as to sovereignty of outer space. What is the international law in relation to outer space? A lot of questions are involved. Many challenges. Very interesting.

In a sense, I wish I were a young man starting out again for the next 30 or 40 years to know what those interesting questions and challenges are going to be, and in the hope that I might be a little part, at least, in trying to meet and solve them. But we have an interesting period, anyway.

Looking ahead, it is amazing. From our own angle, what are we going to do to guide these great changes along an avenue that will preserve a government of laws and not of men? Those are great questions.

What have we to do in the Congress to reassess our own organizational setup to meet the new age, whether you call it the nuclear age, outer space age, or anything else?

As a matter of fact, we are in a different age today than 10 years ago. Those are all interesting questions. But, from the broad aspects of outer space, does the international law of yesterday apply? Could it, even basically?

Where does sovereignty start and end in outer space? Those are big questions.

What kind of international law can we establish? Because you have to have a law before you can have order.

Those are questions that mankind has to struggle toward trying to solve.

And involved in that is the honesty of approach, and, where there is dishonesty of approach on the part of any nation, and, more particularly, any powerful nation, the difficulty of a solution.

Then, our own weaknesses and our strengths. All those things are involved.

This resolution represents a great idea. It represents a national objective which is affirmative in nature.

Those are the thoughts that prompted the members of the House Select Committee on Outer Space in conceiving this type of resolution, and in voting to have me introduce it.

For whatever value my opinion is to you and the members of your subcommittee, I commend it, the views of the select committee, which consists of members that very broadly represent both parties in the House of Representatives, and, in that sense, very broadly represents the House of Representatives itself.

I hope the subcommittee will act favorably upon it and, if so, do so promptly, because I think time is of the essence, quick action, so that with the passage of this concurrent resolution the world knows the position of America, and our State Department and other officials can carry the message in the way that they think it should and can be most effectively carried forth, this great idea that we have in mind, the utilization of outer space for peaceful purposes and not for military purposes.

As a start—there is less difficulty now, because nobody has control. The competitive race along the military angle hasn't started. If something can be done, who knows what it might lead into in other directions?

That concludes my statement.

Mr. BURLISON. Thank you very much, Mr. McCormack. Your discussion is extremely interesting, needless to say.

We have four of the subcommittee present. We are complimented by so many members of the parent committee coming to this subcommittee meeting.

We will want to hear from you who are not members of the subcommittee; but, first, I think it is usual that we have questioning from the subcommittee members.

May I ask, Mr. McCormack, can you conceive of any situation that, when this idea is submitted to the United Nations, and the Soviets did not agree, the United States would be surrendering, or impairing in any manner, its jurisdiction in outer space or its rights or sovereignty?

Mr. McCORMACK. No.

Mr. BURLISON. Thank you. Mrs. Bolton.

Mrs. BOLTON. May I go off the record?

Mr. BURLISON. Certainly.

(Discussion off the record.)

Mrs. BOLTON. Did I understand that at one point you spoke of it being permanent in its nature, this resolution?

Mr. McCORMACK. I don't believe I said that.

Mrs. BOLTON. I will read it over. I think there is nothing less permanent than our knowledge of space. We have no knowledge of what

goes on out there, really, except what these scientists may bring to us, which, I hope, will be something.

I think we will find our own place in the solar system such that it will humble us quite a little. We will find that we are not the center of the myriads of universes. Possibly we shall have the same experience in this that I once had with my boys when we went here to the observatory in 1918 and found the glass trained on an absolutely black heaven. Then we went next door to the big glass which had just been opened, which was trained on the same spot in the heavens. What we saw was awe inspiring, for we were looking at myriads of stars.

Mr. Chairman, we have such a courageous chairman for this Space Committee, who has already expressed himself with such complete fearlessness about the adventure, a possible venture into outer space. Certainly, whatever expression we can give as a Congress to the insistence upon peace in outer space should be valuable. As far as man on earth is concerned, we may find we don't have much to do about it when we get out there. There may be some other fellows who live and who are stronger than we are and will have much to say.

Mr. McCORMACK. I was thinking of that.

Mrs. BOLTON. I think it will be very interesting if we can really and truly open our minds to the ideas that that thought gives.

I have no further questions, Mr. Chairman. I thank you.

Mr. McCORMACK. In my house there are many chambers.

Mr. BURLESON. Mr. Fountain, a member of the subcommittee.

Mr. FOUNTAIN. I have no questions or comments, Mr. Chairman, other than to compliment Mr. McCormack for his statement.

Mr. BURLESON. Thank you, sir. Mr. Fulton, who is not only a member of this subcommittee but a member of the Select Committee on Astronautics and Outer Space Exploration.

Mr. McCORMACK. And a very, very contributing member, I want to say.

Mr. BURLESON. And who is also, I believe, author of an identical resolution as that introduced by the majority leader.

Mr. FULTON. I am glad to join with Mr. McCormack in his fine presentation and statement. We have had a very exciting time in these hearings, having the scientists of the country come before us and explain their views on the problems to be met, and, likewise, what we in Government should do to meet these problems that are so basic to our security.

I would like to point out in the resolution, on page 2, line 10, that the statement is that—

the United States shall seek through the United Nations or such other means as may be most appropriate an international agreement.

Mr. McCormack, you believe that gives wide freedom to the President, do you not?

Mr. McCORMACK. Yes. We discussed that in the select committee. That gives complete freedom to our country for negotiations with some other country or group of countries or by and through the United Nations.

Mr. FULTON. Under Mr. McCormack's leadership, our committee has gone into the question of the constructive peaceful programs

that can now be done to utilize outer space for the benefit of mankind.

On line 17 of page 2, there is a phrase:

That the United States should press for an international pact providing for joint cooperation in the advancement of science generally, such as the improvement of communications, the betterment of weather forecasting, and other benefits which can be expected to flow from the exploration of outer space.

You strongly recommend those various levels of international action, do you not, Mr. McCormack?

Mr. McCORMACK. I do. You notice the "betterment of weather forecasting," the improvements of communications, are all connected with the civilian—peaceful. If it were phrased differently, it would be military. The language is strictly in connection with the peaceful use and other benefits.

Mr. FULTON. We had testimony before the select committee that, if we could have advance knowledge in the United States of the sources of weather, as well as advance warning of the bad effects, such as tornadoes, cyclones, and flooding rains, it would be a saving to this country, economically, of several billions of dollars alone for agriculture, river-flood areas, and for the cyclone-tornado areas; is that not right?

Mr. McCORMACK. Loss of lives, timber, and everything else. The basis of that statement is absolutely correct. As a matter of fact, we got that from the head of the Weather Bureau.

Mr. FULTON. Mr. Reichelderfer estimated the savings of several billions of dollars annually to this country.

Mr. McCORMACK. That is right.

Mr. FULTON. Because of being able to forecast crops and floods, and, possibly, preventing some of the recurring tornadoes and cyclones.

Mr. McCORMACK. That is correct.

Mr. FULTON. May I finish by saying that it has been a pleasure to be a member of the select committee, called the Space Committee, under the leadership of Congressman John McCormack and Congressman Joseph Martin, of Massachusetts, because the approach to the serious problems of outer space has been completely nonpolitical and for the best interests of the American people.

If I can remember one time where there was a party-line vote on the committee, I can't put my finger on it. So, I would compliment the committee again on the fact that it has approached this on the basis of a unified policy, and, secondly, as Mr. McCormack has stated many times, to carry out the leadership of President Eisenhower on a nonpartisan basis. Thank you very much.

Mr. BURLESON. Thank you, Mr. Fulton.

Mr. FULTON. May I also finish this by complimenting my good friend, Ken Keating, who is on the Space Committee and is present here today. He has given good, responsible service.

Mr. McCORMACK. I can join in that statement. I include everyone on that committee. It was a revelation to me to be chairman of the committee, because, as leader, you see, I don't have so much committee work, and I have through the years felt the loss of the benefits that flow from committee action and committee consideration. That is where Congress really functions, in committee. In a sense, it has

not only been a great pleasure to me but has been a sort of reeducation on the committee level.

Mr. BURLERSON. Judge Saund.

Mr. SAUND. Thank you, Mr. Chairman. I have no questions. I wish to compliment Mr. McCormack on such a lucid statement, expressing the great hope of America, the hope of peace and service to mankind.

I agree with Mr. McCormack that we should expedite the passage of this resolution in order that America may once again take the lead in this splendid approach to this problem, keeping those arguments in mind, peace and service to mankind. Again, I wish to compliment Mr. McCormack for his work.

Mrs. BOLTON. May I be permitted another question? I suggest that this is another idea for discussion. Suppose, in the study of the causes of the weather, we find that some of these bombs that have been set off have, in reality, upset the balance of nature up there quite a bit and so affected our weather; will that make a difficulty for the committee?

There has been a good deal of argument in the matter, and most of the scientists come together and say, "No, it cannot possibly affect the weather," and then some of the rest of us wonder about it.

Mr. McCORMACK. We looked into that. We received plenty of evidence from that. Weather forecasting, no matter how accurate they are, they admit with their present knowledge is not accurate. They are hopeful of the results of their experiments and the data received that a system as near perfect as humanly possible can be devised. It will be a great benefit to mankind. There are so many other fields.

Mr. BURLERSON. Mr. Fountain.

Mr. FOUNTAIN. I believe I do have one question. I, myself, am satisfied about the answer, but I think it might be well to get it into the record.

Mr. McCormack, is it your feeling that the passage of this resolution and implementation, by whatever means, through the United Nations or otherwise, will in no way impair the sovereignty of this Nation to continue its own research and exploration into outer space?

Mr. McCORMACK. Absolutely, no.

Mr. BURLERSON. Thank you, Mr. Fountain.

The Chair wishes to again repeat that we are delighted to have our colleagues on the full committee present at the subcommittee meeting. You will be very helpful to us when we consider this whole matter before the committee. Mr. LeCompte, do you have a question?

Mr. LECOMPTÉ. I haven't any questions. I do want to commend the majority leader for a fine statement and a fine thought back of the introduction of this resolution.

A few weeks ago I talked with a capable, educated, clear-thinking gentleman, I think, who said to me, "I am not concerned with outer space. Our planet is interesting enough for any one. We haven't explored all of the resources of our own planet." Much of this earth is undeveloped and unexplored.

Incidentally, this man—I won't name him—is a former Member of Congress, and he said, "I think we ought to devote our energy to discoveries and research within our own planet. We are not going to do anything with outer space."

I told him, "That is a thought, but, to me, it is close to the old isolationist idea that we just live within ourselves."

I am in sympathy with this resolution. I think we ought to be concerned with outer space. It is one of the problems of this age. I don't think you can dismiss it.

I am very glad that the majority leader and the Space Committee have introduced this resolution.

Mr. BURLISON. Thank you, Mr. LeCompte. Mr. Coffin.

Mr. COFFIN. Thank you, Mr. Chairman. I came because I thought the subject matter would considerably enlarge our horizons.

I see that I haven't come in vain. I would make the suggestion to the majority leader that, when he gets through with this problem, he might very well change the name of his committee and study the problems beneath the sea. I would think there, too, is an area for possible international cooperation, opening up the mysteries and the possible tremendous resources that might exist.

I make that suggestion not wholly out of a sense of whimsy. I think that is another area that could well stand attention.

I just want to ask one question, Mr. McCormack, and that is, in persuading the Soviet that this is a good idea, we can stress the advantages of communications and the other constructive achievements, but I suppose the language they understand best is the possible disadvantages to them of not doing something.

Would we be able in presenting this, would the President be able to show that ultimately the space will be just as available for us for destructive uses as it is for them, and therefore this is something that even though they are temporarily ahead, it is something for their own safety and security to consider very seriously?

Mr. McCORMACK. Well, I am hopeful that after the passage of the bill establishing the agency, which we will report out at our committee today, we have completed executive session consideration of the bill, that the dedicated men and women of America—that we will rapidly go ahead. We have the facilities; we have the brains. It is the question of top management with power to make decisions, policy and otherwise, and the authority to carry them out—that we will be the leader in the world in these discoveries, we hope the leader in the world for peaceful purposes.

But, again, that depends on the thoughts of others elsewhere. The opportunity is there. We can ignore it, but it is going to go on. We are either going to step into the picture and take an active part or we are going to fall by the wayside.

Any one nation that gets a breakthrough on any one of several things that we can see now, without looking 2 or 3 or 4 years hence, any one of several things that can be seen now, if they got control of outer space they could dominate the world.

If a nation is going to utilize that for peaceful purposes, that is one thing, but if they are going to utilize it for political purposes, I mean, to impose their will on other nations and other peoples, it is another thing entirely.

Not only from the affirmative angle of peace but from the angle of necessities confronting us we have to do it from a national interest standpoint.

Mr. COFFIN. Wouldn't you say it is also problematical whether any nation can effectively control all of outer space? If there isn't the agreement and organization which you advocate——

Mr. McCORMACK. Sooner or later there has to be understanding arrived at between the nations of the world. However, if any one particular nation got a decided advantage, even if it is only temporary, during that period, they would dominate the world and impose their will.

We would never do that. Whatever advance the United States would make would not be for the purpose of imposing its will on others but for peaceful purposes.

I am a great believer in our discoveries, except where the national security of the country is involved, that we should make public to the world the discoveries we make.

I believe in being affirmative minded. I am for a powerful national defense department. But that is in the sense negative.

In the world of today we have to go forward with ideas, appeal to the minds of people, the constructive journey. There are times that the military must be powerful because we are faced with the law of self-preservation of nations, as individuals are occasionally.

We have to recognize the exigencies of the situation in the world we are living in and try to differentiate, to preserve, assure preservation, but have the ideas to go forward in an affirmative way.

That is broadly the way I look at it. Then you come into the different things and you break it down and form your opinion.

I think, and the committee thinks, this is a great idea. I don't think there is anyone who thinks that this will settle everything. There are going to be ever-living questions from generation to generation arising.

But if we can make a real start before the military competitive race starts, a real start in connection with the discoveries being used for peaceful purposes, mankind will benefit.

Then it might become contagious and enter into other categories of military activity, because the human mind, of course, weak as we are, is always trying to search for truth.

Mr. BURLESON. Mr. Adair.

Mr. ADAIR. Mr. Chairman. Mr. McCormack, let me join those who have applauded this prompt and forthright proposal which has been brought in here to meet a problem of the greatest importance.

I have just one brief question: Do you, Mr. McCormack, know whether or not any of the other great powers are contemplating action along the lines proposed by this bill?

Mr. McCORMACK. No, I do not. I would say that most nations probably would. But I can't answer that question.

Mr. ADAIR. So far as you know, we are out in front. If we adopt this, it would be a great psychological victory, would it not, for the free world?

Mr. McCORMACK. I would think so. It has that value, too, the psychological effect of the passage of the resolution, what is commonly called the field of propaganda.

I think this will have a great beneficial effect.

Mr. ADAIR. I share that view.

Mr. McCORMACK. We have to have ideas. There are countless millions of persons who are influenced by an idea. They are temporarily impressed with the Soviet system and its decisiveness and its economic progress. That is the appeal to materialism.

In our concept of government, with the origin of our way of life in the moral law, we cannot ignore the necessities on the material field for preservation, but we have to proceed with the ideas as connected with the moral law.

Mr. ADAIR. I certainly join the gentleman in those sentiments.

Mr. McCORMACK. Thank you.

Mr. BURLESON. Mr. Fulton must leave. They are having an election in Pennsylvania today.

Mr. FULTON. I have to catch a plane to go to vote, but I will be back at 4 o'clock this afternoon. I have given my proxy to Mr. Burleson to vote out the resolution, either with or without amendments.

Mr. BURLESON. I might add that Dr. Morgan, a member of this committee, and acting chairman of the full committee, is likewise unable to be here for the same obvious reason. Mr. Prouty.

Mr. PROUTY. I still find it a bit difficult to persuade myself that this resolution is not something out of a novel by H. G. Wells or some other science fiction writer.

I am sure if when I first became a member of this committee anyone had suggested that soon we would be considering a problem of this nature, I would have suggested that he consult a psychiatrist.

The resolution does indicate the tremendous impact which modern science has had upon our world and the individuals who inhabit it.

I certainly wish to endorse the action of the members of the Select House Committee on Astronautics and the majority leader in offering this resolution. I think it is most important. I hope the people of the country will be well aware of the necessity for such an approach to a very momentous problem. Thank you, Mr. Chairman.

Mr. McCORMACK. Thank you very much.

Mr. BURLESON. Thank you, Mr. Prouty. Is that all?

Mr. PROUTY. Yes.

Mr. BURLESON. Mr. Curtis.

Mr. CURTIS. Thank you, Mr. Chairman. May I join in welcoming to this committee my distinguished colleague from Massachusetts who has been honored by being made majority leader, and say that the State of Massachusetts is very proud that that honor was conferred upon a son of Massachusetts.

Mr. Chairman, the majority leader referred to the statement yesterday by Mr. Hammarskjold. I wondered whether he would want to comment on the thought that this resolution might be enlarged to include a provision that the United States should also press for an international agreement banning national claims to outer space. That is negative. Perhaps affirmatively it might go further and favor international control of outer space through the United Nations or otherwise.

Mr. McCORMACK. I would think that when we use the words "banning the use of outer space for military purposes" that gives a very wide field for negotiation in connection with the use of it for peaceful purposes.

My reaction to my friend's question would be that this has been very carefully gone over in collaboration with the committee and unofficially with the State Department.

It probably would be well to leave the language the way it is. I think what you have in mind might some years hence be accomplished. But this language would be capable of its accomplishment.

I think this language is all embrative, and it would be unnecessary to include any language along the line that my friend suggested in the resolution.

Mr. CURTIS. Isn't it true, Mr. Chairman, that it has been suggested that the United States take a leading position in this field? A resolution of this sort is not going to settle matters, as the Congressman well said. If we are going to take the lead, let's take a good lead.

Mr. McCORMACK. That involves a lot of questions of sovereignty, where it starts, where it ceases, and involves the consideration of international law.

I think our Government has to give great consideration using its dedicated, capable, legal minds on research in international law. You have to have some kind of law. You have to have something, imperfect though it may be, for order to follow.

I notice the president of the American Bar Association made a very able speech recently along that line. I happened to be reading the other night and it attracted my attention very much.

Everything you have suggested is involved, but the use of the language now I think would be a little hasty.

Mr. CURTIS. Thank you, Mr. Chairman.

Mr. BURLISON. Thank you, Mr. Curtis. Mr. McCormack do you have any other comments before we hear Mr. Keating?

Mr. McCORMACK. No. Thank you.

Mr. BURLISON. We also have with us this morning our distinguished colleague from New York, Mr. Kenneth Keating, who is the author of House Concurrent Resolution 265. He is also a member of the Space Committee. We are pleased to have you, Mr. Keating, and pleased to hear you.

STATEMENT OF HON. KENNETH B. KEATING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. KEATING. Mr. Chairman and members of the committee: I have a prepared statement which I will leave with you, and with your leave ask that it be made a part of the record.

Mr. BURLISON. Without objection it is so ordered.

(The statement referred to is as follows:)

STATEMENT OF REPRESENTATIVE KENNETH B. KEATING, OF NEW YORK, BEFORE HOUSE FOREIGN AFFAIRS COMMITTEE ON HOUSE CONCURRENT RESOLUTION 326, RELATIVE TO THE ESTABLISHMENT OF PLANS FOR THE PEACEFUL EXPLORATION OF OUTER SPACE

Mr. Chairman and members of the committee, I appreciate very much this opportunity to appear before this committee and express my enthusiastic endorsement of this resolution. The content and objectives of the measure being considered by the committee are similar to House Concurrent Resolution 265, which I introduced on February 10, 1958. I am firmly convinced that a ringing vote of approval by this group, followed by congressional enactment, will represent one of the most constructive means by which this country can indicate its dedication to the ideal that outer space should be preserved for peaceful pursuits.

There is no doubt that the invasion of space by man presents very real problems which must be faced up to by Congress, by the American people, and by all the nations of the world. Our full-speed-ahead efforts to conquer outer space, the vigorous efforts within the executive branch to press for progress in space, and the extensive hearings being held in both Houses on our future space plans all exhibit the keen awareness of the challenges before us.

Of course, our immediate concerns must be with the military potential of outer space. It is simply commonsense that in this world fraught with dangers and filled with those who would destroy our way of life, that we must constantly work to maintain our military superiority.

The military dangers involved in the development of outer space are very real. The prospect of reconnaissance from satellites, of death rays from whirling mechanisms, of rockets armed with nuclear explosives, and of missiles launched from outer planets—all these are terrible possibilities which may lie ahead. The extension of the tools of war into space heightens tremendously chances for the total destruction of civilization on earth.

It follows that to avoid turning down a road of sure global suicide, the nations of the world must devise means for preventing the use of outer space for military purposes. And, in a more positive vein, we must make every effort to achieve cooperation and sharing of solar information in order to stimulate peaceful advances.

The United States has already taken the lead in pressing for international cooperation on the peaceful utilization of outer space. President Eisenhower, Secretary of State Dulles, and other leaders have proposed that immediate steps be taken to insure that space will not be used for warlike purposes.

The timing of such steps is of the essence. Now, while the patterns and precedents concerning space exploration, use and control are being established, is the time to reach agreement that outer space will not be used for military purposes. Now, before nations gain vested interests in the heavens, is the time to lay down the rules of the road and promote cooperative effort.

It is far wiser to control the infant now than to attempt to chain the giant later.

We need look no further back than the recent Geneva conference on the law of the high seas to find a precedent illustrating the need for quick action to save space from conflicting national interests. The fact that that conference failed to reach agreement on uniform laws for territorial limits and cooperative pacts may be traced directly to the fact that over long periods of use each nation has set its own individual rules and has established firm vested interests which have now cemented into immovable positions.

Congress and the whole United States has a solemn duty to do its part to insure that such a snafu will not develop in outer space. We can and must take steps to see to it that space does not become cluttered with satellites likely to crash into each other, as well as cluttered with conflicting jurisdictional claims which could lead to interplanetary as well as international warfare.

A strong vote of approval by Congress of this resolution, speaking for the American people, will strongly back up our leaders in their quest for agreements to promote the peaceful development of space. It would reaffirm in the eyes of the world our dedication to the cause of peace.

In this great endeavor, America must lead the way. We must pioneer with boldness, imagination, and resourcefulness. We must continue to take the initiative, fully aware of the promises as well as the perils that lie ahead.

And, in the end, if our efforts are successful, we may have opened a new era for all mankind. Perhaps man, freed from the ties of his earth-bound existence by the common challenge of space, might even shake free from some of the jealousies and differences which beset human affairs and place peace on earth on such a precarious footing.

Passage of this resolution by Congress will show the world that the people of America are ready, willing, and able to accept the future with vision, not vexation. It will show the world that we have no desire to engage in swash-buckling among the stars. It will demonstrate to the world that we choose the path to greatness—not oblivion.

Mr. Chairman, our satellite, Explorer, is well named. We have sent it forth into the heavens to search out the facts and implications of a new age. Let us, too, be searching for the means of dedicating this new knowledge of peace and not destruction.

We must insure that down through the years as other Explorers soar upward into space, it will be in search not of targets to destroy life, but of facts to enrich and benefit all men.

I commend the majority leader for having introduced this measure and for having pressed so speedily for its approval. I have every confidence this committee will give this measure its wholehearted support. It is perhaps the most positive means by which Congress can show its good faith and high intentions in the conquest of space.

Mr. KEATING. I want to commend our chairman, the majority leader, for not only the introduction of this resolution but the fine leadership which he has displayed on our committee.

I have never had an assignment in all the time I have been in Congress which has been more self-satisfying, where I have felt that problems were dealt with in a more unpartisan way and a real desire to get facts, than in this committee. It is largely due to the fine manner in which the chairman has conducted all of our hearings.

He spoke of not having had much experience in the field of committee work. Some of us think he is trying now to pack all of those years into a few weeks. We have been meeting morning and afternoon, and he is a real hard taskmaster. But the people of his congressional district and the United States Treasury are getting their money's worth out of the way he is tackling this task before him. While we may at times feel his whip, it is a sting that we admire and really enjoy.

Among those who have supported this general approach he spoke of the Secretary General of the United Nations. I was gratified to read what he said, and share in Mr. McCormack's views that it is precisely in line with this resolution. Also, the Ambassador of New Zealand, Sir Leslie Munro, has been one of the leaders in this movement and has been making a number of very fine pronouncements along this line.

To answer one of the questions which has been asked, I do not think any other nation has, to date, done anything like this, and that is why I feel it imperative that we step out and be in the forefront of this movement. I felt that strongly when I introduced, on February 10, 1958, House Concurrent Resolution 265. I am firmly convinced that a ringing vote of approval by Congress will represent one of the most constructive means by which this country can indicate its dedication to the ideal that outer space should be preserved for peaceful pursuits.

There is no doubt that the invasion of space by man presents very real problems, which must be faced up to by Congress, by the American people, and by all the nations of the world.

There is no question but that our full-speed-ahead efforts to conquer outer space is a phrase that is sometimes misunderstood. The greatest amount of evidence before us was that no country can get complete control of outer space, the reaches are so vast. So, when the phrase is used, we mean to plumb the depths of outer space and find out what it is all about there. But the vigorous efforts on the part of both the executive branch and the legislative branch are necessary because of these challenges before us.

Now, of course, our immediate concern must be with the military potential of outer space. It is simply commonsense that, in this world fraught with dangers and filled with those who would destroy

our way of life, we must constantly work to maintain our military superiority.

The military dangers involved in the development of outer space are very real. The prospect of reconnaissance from satellites, of death rays from whirling mechanisms, rockets armed with nuclear explosives, missiles launched from outer planets—all of these are terrible possibilities which may lie ahead. The extension of the tools of war into space heightens tremendously the chances for the total destruction of civilization on earth.

It follows that, to avoid turning down such a road of sure global suicide, the nations of the world must devise means for preventing the use of outer space for military purposes. And, in a more positive vein, we must make every effort to achieve cooperation and sharing of solar information in order to stimulate peaceful advances.

The United States has already taken the lead in pressing for international cooperation on the peaceful utilization of outer space. The President, the Secretary of State, and other leaders have proposed that immediate steps be taken to insure that space will not be used for warlike purposes.

My idea is that, if Congress backs this up, it will say emphatically that this is the will of the people—that space not be used for military purposes and should be free for use by all nations. It will have a very salutary effect around the world, particularly among the so-called uncommitted nations.

The timing of these steps is of the essence. Right now, while the patterns and precedents concerning space exploration, use and control, are being established is the time to reach agreement that outer space will not be used for military purposes. If any nation gains what might be called a vested interest in the heavens, then it will be too late to lay down the rules of the road.

It is far wiser to control the infant now than to attempt to chain the giant later.

We need only to look at the recent Geneva conference, where the nations tried to get together on agreement affecting the law of the high seas, to realize the problems involved once nations get firm, entrenched positions. The fact that conference failed to reach agreement on uniform laws for territorial limits and cooperative pacts may be traced directly to the fact that over long periods of use each nation has set its own individual rules and has established solid vested interests which now have cemented into immovable positions. It is natural that each nation is now looking out only for its own interests and that a deadlock resulted.

The Congress and the whole United States has a solemn duty to do its part to insure that such a snafu will not develop in outer space. A strong vote of approval by Congress of this resolution, speaking for the American people, will strongly back up our leaders in their quest for agreements to promote the peaceful development of space. It would reaffirm in the eyes of the world our dedication to the cause of peace.

In this great endeavor, America must lead the way. We must pioneer with boldness, imagination, and resourcefulness. We must continue to take the initiative, fully aware of the promises as well as the perils that lie ahead.

And, in the end, if our efforts are successful, we may have opened a new era for all mankind. Perhaps man, freed from the ties of his earthbound existence by the common challenge of space, might even shake free from some of the jealousies and differences which beset human affairs and place peace on earth on such a precarious footing.

Passage of this resolution by Congress will show the world that the people of America are ready, willing, and able to accept the future with vision, not vexation. It will show the world that we have no desire to engage in swashbuckling among the stars. It will demonstrate to the world that we choose the path to greatness—not oblivion.

Mr. Chairman, our satellite, Explorer, is well named. We have sent it forth into the heavens to search out the facts and implications of a new age. Let us, too, be searching for the means of dedicating this new knowledge to peace, and not destruction.

We must insure that down through the years, as other Explorers soar upward into space, it will be in search not of targets to destroy life, but of facts to enrich and benefit all men.

I again want to commend the Majority Leader for having introduced this measure and for having pressed so speedily for its approval. I am sure that this committee will conclude that it deserves full support. It is perhaps the most positive means by which Congress can show its good faith and high intentions in the conquest of space.

I appreciate very much, Mr. Chairman, this opportunity to be heard this morning.

Mr. BURLERSON. Thank you, Mr. Keating. Mr. Keating, you support House Concurrent Resolution 326 although you have a similar resolution.

Mr. KEATING. Well, you take a certain pride in your own language. I emphatically and enthusiastically support House Concurrent Resolution 326.

I think, as you have asked me, there might be some language in 265 which could be incorporated in 326. I think some already has been. I do not want in any way, in saying that I like my own resolution, to detract from my emphatic endorsement of Mr. McCormack's resolution.

Mr. BURLERSON. Thank you, Mr. Keating. The question was raised by Mrs. Bolton as to the control of the weather. I think Mr. Fulton discussed it also. In the last several months, since this question has come into prominence, the possibilities of a nation which controls outer space, possibly control weather conditions could change a whole continent.

You agree that—

Mr. KEATING. The evidence before our committee, as I recall it, was that it seems to be generally agreed that by activities in outer space you can gain a great deal of new knowledge concerning weather prediction. That in itself would, as has been said, result in the saving of billions of dollars to our own people in this country by accurate prediction of weather way in advance.

There is a dispute, as I understand it, among the scientists as to whether it is going to be possible to control the weather. There are those who think that when we get to that point of accurate prediction of weather we will then be able to actually do many things to control weather. Of course, if that ever happens, it can represent the

greatest boon to mankind that you could imagine, or it can be the greatest means for destruction of mankind if the wrong kind of forces controlling the weather are unleashed.

The possibilities of the improper control of weather include the inundation of an entire continent. It is just fantastic what could be done by a military power that wanted to use the control of weather for ulterior or sinister purposes. We have to assume that all nations are going to see the foolishness of that. If we ever get to the point of controlling weather, it would be, as you could imagine, the greatest thing in the world.

Mr. BURLISON. Mrs. Bolton.

Mrs. BOLTON. Mr. Chairman, I shall take the greatest interest in the study of these two resolutions. I think some of the language in Mr. Keating's resolution appeals to me as being very forceful, very simple, very forthright. I do have a very serious question in the second whereas in Mr. McCormack's resolution about the words that were brought out a moment ago, the conquering of outer space.

No human mind is going to be permitted to conquer outer space. I would hope very much that Mr. McCormack would not mind if the committee changed that to a less arrogant word, less all-inclusive.

I am so certain that man is never going to conquer outer space. That is to the end of all other universes that have not even been found.

Mr. McCORMACK. I have no objection.

Mr. BURLISON. I understand, however—you respond for yourself—from both Mr. McCormack and Mr. Keating that their use of the word is relative.

Mrs. BOLTON. I think the present wording would not be readily understood by many people who have not had the opportunity to go into these matters quite so much.

Mr. McCORMACK. Put in the word "exploration."

Mrs. BOLTON. Some other word at least. I would also like to suggest—it came to me when Mr. Keating was speaking of knowledge of the weather, for instance—is it not true that in the creation of our universe and other universes as time goes on, that everything seems to be in pairs of opopsites. We have night and day. We have dark and light. We have good and evil. We have all these opposite things. I think if we can take that fact into consideration in wording the final resolution we should bear in mind that there is always a possibility in these great scientific truths we are being permitted to discover, that man can use them for good or can use them for evil.

Take, for instance, our motion pictures, which is such a marvelous medium for education. It certainly does us no good in many areas of the world in the way it is used. It does not do our children too much good in many areas of topics that are used, when it could be used entirely constructively. There is always the other possibility.

I am so happy that you, Mr. Keating, in your resolution brought out strongly that what is important is that we may insist that all our actions as a nation and the action of all other nations be constructive.

Mr. BURLISON. Thank you. Mr. Fountain.

Mr. FOUNTAIN. Mr. Chairman. Mr. McCormack, was there any particular reason for using the language on page 2, "and should strive to reach the moon and the planets" since the general language of the resolution is broad enough to cover such trips.

Would you have any objection to leaving out the "moon," and say, "try to explore outer space"?

Mrs. BOLTON. What line is that?

Mr. FOUNTAIN. Line 1, page 2. There are probably many who still feel that we are talking through our hat. While we know otherwise (I hope we do) there are many reasons why we should stay away from specifics and deal generally with such explorations. I wonder if that language could not be deleted and other language used that would be broad enough to cover all aspects of exploration.

Mrs. BOLTON. We might unexpectedly land on Jupiter or Neptune.

Mr. McCORMACK. That was only for descriptive purposes. It has been called to my attention that it is related to the later language. "The moon and the planets" is certainly an indication there are other planets, as we know, millions of them.

Mr. FOUNTAIN. My thinking has not matured on it. Even "explore the moon" might be better.

Mr. McCORMACK. We went over that in the committee pretty well. We discussed that very question. The difficulty of arriving at words in a resolution that would carry out the context of that particular whereas, there we encounter difficulty. That is connected up with the later language, "rather than the expropriation of other worlds for the benefit of one nation or group of nations."

Mr. FOUNTAIN. One further question: I'd like to get your interpretation of this language beginning on page 1, "that the Congress of the United States believes that the nations of the world should join in the establishment of plans for the peaceful exploration of outer space," this is followed by language which says "should ban the use of outer space for military aggrandizement and should strive to reach the moon and the planets." Do you construe this language to mean that all nations collectively or that each nation of the world should strive to do these things?

Mr. McCORMACK. That has to be considered in connection with the later provisions of the resolution, that is, the "United States shall seek through the United Nations or such other means as may be most appropriate an international agreement." That would mean that if we found a fertile atmosphere in the United Nations, that could be utilized. If not, our country could enter into negotiations with other nations or a group of nations.

As we know, in the world of today there are probably not so many nations capable at this time of incurring the financial obligations necessary to make these explorations and discoveries and perfect them.

That is left rather wide for our State Department and our diplomats and our Chief Executive, the President, to consider on the facts that they would confront. I think the wide latitude is there and probably it is better to leave it the way it is.

Mr. BURLESON. Judge Saund.

Mr. SAUND. Thank you, Mr. Chairman. I wish to compliment Mr. Keating for his fine statement, which is made in his characteristic scholarly manner. I think it will be a real contribution.

Mr. KEATING. Thank you.

Mr. FOUNTAIN. I did not intend to pick on Mr. McCormack when you, Mr. Keating, were testifying. What is your reaction to the questions I posed to Mr. McCormack, Mr. Keating?

Mr. KEATING. If I were sitting down to draw a resolution, it would not be precisely in this form, which is evidenced by the fact that I have a different wording in mine, which I pored over and had experts working on for a long time.

I have to be frank and answer you that way. However, I have enthusiastically voted for Mr. McCormack's resolution.

I think when you consider it in executive session, from my point of view, I would have no objection to any appropriate changes which you thought you should make to carry out the intent. I do not believe he would, either. I do not want to speak for him, but I do not think he would. We have all approached this without any particular pride of authorship.

As he said, his resolution was unanimously adopted in our committee. I would just as soon see the words "moon and the planets" out of there.

We want to tell this not only to the nations of the world but to our own people. It might be accepted better if you devise some change in language. I certainly would not object to such changes as your committee felt you would want to make there.

Mr. FOUNTAIN. I personally think, so far as the overall resolution is concerned, this is an appropriate time to take some action. While I may be dreaming, I can envision the time if something like the action proposed in this resolution does not take place—if we do not get an international agreement at a time when it can certainly be more easily accomplished, I can envision military space stations above occupied by forces of some other nation saying to us below: "We are up here to keep peace. This is ours. We have staked our claims upon outer space. If you come in this direction beyond the atmosphere, we will consider that an act of aggression." Then each nation capable of getting into outer space will start making its claims. What may well follow is clear.

Then, as Mr. McCormack indicated, one or more nations may attempt to dominate the world. In fact, it could be done, and we on earth would live in constant fear of destruction.

Mr. KEATING. I feel very strongly that the form the resolution takes is not as important as it is to have a resolution which carries out the intent—and have it quickly.

Mr. BURLISON. Thank you. I might add that the subcommittee should remain, because we would like very much to act on this matter before we adjourn.

Mr. MCCORMACK. For the record, may I express the appreciation of myself, as chairman, and all the members of the Select Committee, for the very prompt consideration given by this subcommittee to the resolution.

You had it assigned for last Thursday, but in view of the Vice President's arriving back you wisely postponed it because of the necessities of members—not the necessity, but the feeling on the part of members and the desire to be present on that occasion.

Now, you have it down for Tuesday. For myself, as chairman, and the members of the committee, I extend my thanks to you and through you to the members of the subcommittee.

Mr. BURLISON. We appreciate that, Mr. McCormack. Just as soon as we can determine when Dr. Morgan can get the full committee together—which Mr. Bullock thinks will be Thursday, perhaps—we

expect to present this matter and dispose of it just as expeditiously as can be done.

These statements are not to indicate, Mr. Prouty or Mr. Curtis, that you should not ask any further questions.

Mr. PROUTY. I merely wish to commend our distinguished colleague from New York for a very able and thought-provoking statement.

Mr. CURTIS. I join in welcoming the ranking minority member of the Committee on the Judiciary, of which I was a member——

Mr. KEATING. We miss you.

Mr. CURTIS. Is it not a fact that Concurrent Resolution 268 submitted by Mr. Keating does contain a provision, in effect, banning national claims to outer space? That would be on page 2, where it proposes an international agreement that outer space shall not be "subject to appropriation by any nation."

Mr. KEATING. If it is a question, I think the answer is yes. I think that covers the point you raised.

Mr. CURTIS. I am glad to see that Mr. Hammarskjold has taken up the point that was raised by the distinguished witness on February 24, 1958, when his resolution was filed.

Mr. KEATING. I think a lot of us have been thinking about this for a long time. I think that was what he was talking about. Mr. Hammarskjold, as have others, has had this resolution in his hands for a long time.

Mr. CURTIS. Does the witness regret that that provision was left out of the final draft as reported to this committee?

Mr. KEATING. If I were writing it here, I would put that in. But I repeat that I think whatever we do should be done with the complete concurrence of everyone.

I would hope that when this resolution comes to the floor it will be approved by unanimous vote, and I would hope, a rollcall vote. I think it would be helpful to our international standing to have it done in that manner.

I do not want to throw out any possible conflict in language. I agree with Mr. McCormack completely that we should have the approval of the final draft by the Department of State. I think their views might well be sought concerning any possible changes in language. I do not think any of us has a closed mind on what should be or should not be in the resolution.

Mr. BURLISON. We have the Legal Adviser of the State Department here whom we expect to hear, and also the General Counsel of the Department of Defense.

If there are no other questions for Mr. McCormack or Mr. Keating, we are glad to have Mr. Becker, if he will come forward.

Thank you both for coming, Mr. McCormack and Mr. Keating.

I present Mr. Becker, the Legal Adviser of the Department of State.

STATEMENT OF HON. LOFTUS BECKER, LEGAL ADVISER, DEPARTMENT OF STATE

Mr. BECKER. Mr. Chairman and members of the subcommittee, I am here representing the Department of State to express its views concerning House Concurrent Resolution 326.

As Mr. McCormack mentioned, we were consulted before this resolution was introduced and indicated at that time informally that we were in favor of it.

As we view the resolution, it is a blueprint of objectives as to where we are going with respect to the exploration and exploitation of outer space.

I am glad to state that the Department of State is heartily in favor of this blueprint.

I would like to point out specifically that we have not only expressed ourselves in favor of it, but that we have already taken an initiative in this field as early as January 14, 1957.

At that time, Ambassador Lodge to the United Nations said that the first step toward the objective of assuring that future developments in outer space would be devoted exclusively to peaceful and scientific purposes would be to bring the testing of such objectives under international inspection and participation.

That was the first instance in which any nation recognized that there was an immediate need of dealing with this compelling problem which is also dealt with by this resolution.

Since that time, we have repeatedly stressed the need, and our willingness, to reach agreement in this vital field. During the 1957 United Nations Disarmament Subcommittee meetings in London, in concert with our allies, we formally proposed beginning measures to control for peaceful purposes the sending of objects through outer space.

This proposal reflected our earlier expressions of concern over the dangers of surprise attack in the outbreak of accidental war. It represents an extension upward of our aerial and ground inspection proposals.

This proposal was designed to allay those same dangers that are inherent in the continued growth and proliferation of missiles.

Again, in January this year, President Eisenhower, in a letter to former Premier Bulganin, expressed our concern and our desire to reach agreement on this matter.

I would like to quote from that letter, which reads, in part, as follows:

I propose that we agree that outer space should be used only for peaceful purposes. We face a decisive moment in history in relation to this matter. Both the Soviet Union and the United States are now using outer space for the testing of missiles designed for military purposes. The time to stop is now.

I recall to you that a decade ago, when the United States had a monopoly of atomic capabilities and of atomic experience, we offered to renounce the making of atomic weapons and to make the use of atomic energy an international asset for peaceful purposes only. If only that offer had been accepted by the Soviet Union, there would not now be the danger from nuclear weapons which you describe.

The nations of the world face today another choice, perhaps even more momentous than that of 1948. That relates to the use of outer space. Let us, this time, and in time, make the right choice, the peaceful choice.

Today, we have pending before the Disarmament Commission of the United Nations a proposal set forth at London in August 1957. It stands as 1 of 5 basic principles overwhelmingly endorsed by the United Nations as the basis for continued disarmament negotiations.

This proposal calls for nations to cooperate in the establishment of a technical committee to study the design of an inspection system which would effectively cover the field of ballistic missiles and other

outer-space objects to assure their development for exclusively scientific and peaceful purposes.

Moreover, we have offered to join immediately in such a study, on a multilateral basis, without awaiting the conclusion of negotiations on other substantive proposals.

The Department of State believes that this proposal represents a significant first step toward preventing the use of outer space for military purposes. We intend to continue to emphasize the need to turn this proposal into constructive action.

Now, I would like to turn to another aspect of the resolution, that is to say, the field of international cooperation.

It is true that there are certain military implications to the use of missiles in outer space. A most obvious illustration of this is the close relationship between the missile-propulsion systems and the means of putting scientific satellites into orbit. Yet it makes clear that an international program of scientific study and exploration is related to efforts to assure the use of outer space for peaceful purposes.

There are many other highly technical considerations involved here. All of those are under very active study in our Government.

The Department of State feels, however, that there are possible arrangements for international cooperation in the peaceful scientific and technological areas of outer-space activity.

These arrangements could be pursued independently of control arrangements over military uses of outer space. Such cooperation would avoid conflicts of exclusively national programs.

It would allow for necessary coordination of activities, thus assuring the most productive efforts. It would facilitate progress through a combination of efforts which would greatly accelerate scientific discoveries. It would provide a means by which many nations would participate in this new venture. It would insure that the scientific study of outer space is carried on in the classic tradition of scientific openness.

Finally, such cooperation would set the pattern for further space activities, thus assuring the world of a logical and peaceful progression into the reaches of outer space.

To foster and guide the cooperative efforts that are possible, we believe it to be axiomatic that some appropriate international machinery should be created. Its principal responsibility would be to promote and to coordinate efforts in the field of outer space.

Its functions might include, among other things, the establishment of certain international space regulations, the collection and exchange of information, and appropriate planning and coordinating of outer-space research and exploration.

To undertake these functions properly, the agency might well be established under the auspices of the United Nations, but, in any event, should have a suitable and necessary relationship with the United Nations and with other international organizations, such as the World Meteorological Organization. In this respect, a precedent has already been set. I refer, specifically, to the International Atomic Energy Agency.

As you are aware, this Agency has the task of both promoting international exchange and scientific cooperation, as well as assuring that nuclear materials in its possession are used exclusively for peaceful purposes.

There is no reason to believe that a space organization formulated along similar lines could not be just as effective, or more effective, since we have this IAEA experience from which to draw.

We in the State Department at this time envisage no obstacles, political or technical, which would preclude the establishment of such an international system of cooperation and coordination.

We, in fact, believe that only through the creation of such an international organization will the interests of science and humanity be amply protected and assured.

I should add that international space cooperation is already imbued with some encouraging possibilities of collective action.

In March of this year, the Soviet Union placed on the provisional agenda of the 13th General Assembly an item calling for, among other things, "the establishment of a United Nations agency for international cooperation in the study of cosmic space."

This could mean that the first imperative step has been taken—recognition of the need for international cooperation in this field. If this is so, it allows for an initial atmosphere of hope. Yet, even here, there remain initial problems.

This proposal I have just quoted is tied to a broad international agreement which includes, among other things, a provision for the elimination of foreign military bases.

That is an old Soviet proposal, and one we are not prepared to accept. Further, we see no link between international space cooperation and elimination of foreign bases. Thus, it is clear that a number of other steps must be taken before we can gain the staggering opportunities and benefits which await a peaceful, international venture into this new world.

We have yet to reach a practical agreement which offers assurance that space shall be devoted to peaceful purposes and that there shall be international cooperation in exploring its infinite bounds. Until a satisfactory agreement has been reached, we in the State Department shall maintain and preserve every national right of the United States in the atmosphere and in space.

I would like to add a comment with respect to the suggestions that have been made to the effect that now may be the time for the United States to renounce whatever rights it may have obtained by its activities in space. In our view, it would be premature to make any such renunciation of our rights. I think a very apt analogy is furnished by the position that we have consistently maintained with respect to Antarctica.

In that area the United States for many, many years has engaged in activities which under international law has given the United States, without any dispute, rights in that area upon which claims of sovereignty could be based.

We haven't actually made any claims of sovereignty in that area. Other nations have made claims of sovereignty. And we have made it very plain that we do not recognize any of these other claims of sovereignty.

At the same time we have consistently reserved all of our rights. And just a couple of weeks ago we sent out an invitation to 11 nations to sit down and discuss an international regime for Antarctica.

I would like to call attention to the provisions of the treaty that we suggested in that regard. We said that it should be based on these principles:

(a) Freedom of scientific investigation throughout Antarctica by citizens organizations and governments of all countries, and a continuation of the international scientific cooperation which is being carried out so successfully during the current International Geophysical Year.

(b) International agreement to assure that Antarctica be used for peaceful purposes only.

(c) Any other peaceful purposes not inconsistent with the Charter of the United Nations.

I think the analogy will be evident to you.

In that instance we did not make a claim of sovereignty ourselves. We suggested to the other nations that all claims based upon whatever rights had been created by activities in that area be reserved, to use a lawyer's term, put in escrow, during the time of the international agreement, because we felt it was more constructive to get ahead with the activity on a peaceful basis than it was to sit down and argue about legal claims.

But I do call attention to the fact that at the same time we expressly reserve whatever rights the United States has.

So that we have not given them up, even in Antarctica in proposing an international administration.

Mr. BURLISON. Mr. Becker, you leave no doubt about the support of the Department of State for this resolution.

Do you have any suggestion as to any change in language?

Mr. BECKER. We are satisfied with the resolution as it stands.

Mr. BURLISON. Thank you very much. Mrs. Bolton.

Mrs. BOLTON. I feel as the State Department appears definitely to feel, that the United States should lead in the setting up of an organization.

It seems to me it is stated rather clearly in Mr. Keating's resolution, "Adaption of an existing international organization, or agency, or formation of a new one for the joint exploration of outer space."

That is what you are saying?

Mr. BECKER. That language is fine, too.

Mrs. BOLTON. You would have no objection to making certain changes in the wording that is included in the McCormack resolution, would you?

Mr. BECKER. I certainly would not take the position that we would object to any changes.

I would have to see what the changes were.

Mrs. BOLTON. We would submit them to the Department. That is understood, isn't it, Mr. Chairman?

Mr. BURLISON. If we make any substantial changes we shall submit them to the Department before acting.

Mrs. BOLTON. I thought it was said a few minutes ago that we would.

Mr. BURLISON. I would say substantial changes; wording, no.

I would see no reason why we should unless the changes are substantial.

Mrs. BOLTON. I wanted it to be clear. I don't have any particular questions.

Mr. FOUNTAIN. I wonder if you would explain to me at least the first eight lines of this resolution, please?

Mrs. BOLTON. 326?

Mr. FOUNTAIN. Yes. I have in mind particularly whether that is encouraging collective action or individual action or a combination of both collective and individual action by the nations of the world.

Mr. BECKER. Sir, I read that introductory clause in the light of the specific paragraphs that follow. I think that is a general introduction that expresses the general idea that there should be international cooperation, international undersanding that space would be devoted to peaceful purposes, and international action to insure that the results of the exploration of space and the moon and the planets will be for the benefit of everybody rather than for individuals.

Then the resolution goes on and suggests various ways through which that can be accomplished; the first is an agreement banning military use; the next is an international agreement for joint exploration.

I think it is a very good thing about this resolution because we are going into an area where we don't have many facts. We are feeling our way. Therefore, it leaves pretty much to the discretion of the President the precise implementation of it.

Then the final paragraph is a much broader idea, that we shall have general international cooperation in the scientific activities of outer space.

I would read that first paragraph in relation to these specifics that come later.

Mr. FOUNTAIN. I would, too, had these specifics been numbered. Of course, if it were in the whereas clause, there would be no question about it.

As I read it, that the Congress of the United States believes that nations of the world should join in the establishment of plans for peaceful exploration of outer space, I think you would insert inferentially that the nations of the world should ban the use of outer space for military aggrandizement and the nations should strive to reach the moon and the planets, wouldn't you?

Mr. BECKER. Yes. I think the "nations" is implied there; that is correct, sir.

Mr. FOUNTAIN. Does that mean they should collectively or individually do it, or is that purposely left open to cover all efforts collectively or individually.

Mr. BECKER. I would say the resolution leaves it open. For example, if you come right down to it, at the present day there are only two nations that have a capability in the area.

If you are talking about actual cooperation in doing something, those two would probably have to be the two that have to agree. Other nations may get a capability, or the scientists of other nations, even though the nation does not have a capability, mainly to contribute to our own effort.

I think the resolution would enable you to operate under any of those hypothetical situations.

Mr. FOUNTAIN. That may be what we want. I don't know. I see definite advantages of very general language.

Mr. BECKER. I would say, Congressman, this resolution is a good resolution in the sense that it is written like a constitution, which always uses very general terms as distinguished from a specific statute where you have to spell out what people are to do.

This is intended as a blueprint, a forecast. In that respect, the greater the generality the better.

Mr. FOUNTAIN. That is why I raised the question about the specifics of trying to reach the moon and planets.

I was simply wondering if that language would be construed as encouraging each and every nation of the world "to strive to reach the moon and the planets?"

Mr. BECKER. The reason I rather like the words is that space to my own mind is a sort of an empty concept. I tried my hand at some drafting. At one time I had space including the moon and the other celestial bodies, so that you indicate that it includes not only this emptiness but these very tangible planets and other celestial bodies.

Mr. FOUNTAIN. I realize these other paragraphs are to be considered in the light of what has been said, but you do get specific when you say, "reach the moon and the planets."

Mr. BECKER. "Planets" may be too confining. Maybe you want to say, "other celestial bodies."

Mr. CURTIS. Mr. Becker has said this resolution is really a blueprint of objectives. If we have an objective that we do not favor national claims to outer space, why shouldn't we state that as an objective that we believe in?

Mr. BECKER. I would not say that at this moment, that we do not favor giving up national claims to outer space.

Let's go back a bit and philosophize as to how you get national claims. You get them because your nation exerts a certain amount of initiative and devotes its resources to doing something that involves an ability to take some action in a particular area, whether it be on an area such as the Antarctica or it be an area in space.

We are prepared, if other nations will agree, to a type of an agreement that we think is consistent with the common defense and security of the United States and our protection.

We are prepared under those circumstances to consider international cooperation and international agreement. We think it is too early, however, to renounce on behalf of the United States any claims that can be made unilaterally by the United States on the basis of its activities until, (1) we know more about the area we are talking about and (2) we have some assurance that others are going along with us.

We think it would be a mistake for the United States unilaterally to renounce any rights at this time.

Mr. CURTIS. Mr. Becker says he would not be in favor of renouncing claims. What he says amounts to favoring an offer to renounce claims if everybody else did. That is about what you stated; wasn't it?

Mr. BECKER. It is close to it, not exactly, because I would say at this point we are feeling our way. We think that all we need say at this time is, "Let's devote outer space to peaceful purposes; sit down at the table with us and discuss that."

Once you start to discuss peaceful purposes you will start to define the purposes for which space can be used, and also you will reach some agreement as to who can do it and under what auspices.

That involves a negotiation. It is going to involve a negotiation with some of the toughest negotiators that exist. We would much prefer not to have our hands tied in advance in that negotiation.

That is about what it amounts to.

Mr. CURTIS. Mr. Becker, you compared this situation with Antarctica. There national claims have been made. Am I right in believing up to the present time no national claims have been made to outer space?

Mr. BECKER. In Antarctica the United States has made no claim. As far as outer space is concerned, I am aware of no claims being made. It has been asserted that as a result of the International Geophysical Year that in some way we are estopped to make any claims.

I reject that argument, because the facts are that the International Geophysical Year was arranged not at the intergovernmental level but through private scientific organizations.

At the time the Year was announced various governments, including the Soviet Union and the United States, announced that they were individually going to put objects into orbit for scientific purposes. So that the most you can spell out of that is an implied agreement that for the period of the International Geophysical Year scientific satellites would be permissible.

Where we go from there is a matter for negotiation and agreement.

Mr. CURTIS. You do say that no national claims to outer space have been made?

Mr. BECKER. I am aware of none that has been made.

Mr. CURTIS. Is not this a wonderful opportunity for the world to get together before those claims are made and express the objective that it would be better if those claims should not be made but some other method of agreeing on outer space should be reached?

Mr. FOUNTAIN. If I may interrupt the gentleman. The only difficulty to that position, it seems to me, is that an international agreement may well result in the establishment of claims between nations of the world; might it not? And why renounce something that ultimately you might have to claim.

Mr. BECKER. Let me point out as a hypothesis an example of where that might be helpful. Let me say two nations have a capability of getting to outer space, and it was now agreed that outer space would be devoted exclusively to peaceful purposes, and they asserted the right to police outer space to see that it was preserved for peaceful purposes.

Under those circumstances I can see some benefit in those two nations preventing another nation from going into outer space in order to put a military object into outer space.

We are dealing here with an area that you have to be very careful of how specifically you define your objective because you have two things to think of. You have got what do we want the other fellow to do there, and what do we want to do there. We know our objectives there are innocent and good and constructive for the benefit of mankind. We are not sure that everybody else feels the same way.

Under those circumstances I do not think it is to our national interest to say that we renounce all right to determine how outer space shall be used.

Mr. FOUNTAIN. I agree with you.

Mr. CURTIS. I would like to repeat my question, Mr. Chairman. If it is a fact that no national claims to outer space have yet been made, is not this a very appropriate time to face the question whether we believe that national claims to outer space should not be made?

Mr. BECKER. I am not sure. I am aware that a number of people have said that outer space should be like the open sea, free to all. I am not sure that national claims in outer space are an unmitigated evil. For example, if today, to follow up my answer to the last question, the United States were able to assert and maintain complete sovereignty over outer space, I would have the assurance that outer space would never be devoted to warlike purposes.

I am not sure that would happen if it were open to all, because there are other nations that do not quite feel the way the United States does.

I think our primary objective is to see that outer space is devoted to peaceful purposes. If for that purpose it is necessary for us to assert claims of sovereignty or a right in outer space, I think we should do so.

Mr. CURTIS. We have a right to the high seas but we do not claim any national sovereignty over the high seas, as I understand it.

Mr. BECKER. The high seas is recognized as free to all. Nobody under international law can claim sovereignty over the high seas. That is well recognized, outside the territorial waters.

Mr. CURTIS. Would that not be a precedent for outer space?

Mr. BECKER. I have thought about that a great deal, sir. My answer would be this: It is a little dangerous in an area where the conditions of which we know so little to transfer a set of rules of international law that have been developed over hundreds of years in an area that we are very familiar with.

I have just come back from the Geneva Conference where they were attempting to codify the law of the sea. There is a tremendous amount of agreement even with respect to that.

I think in outer space we should sit back and make a set of rules that are adapted to the area with which we are dealing. I think our scientists will be the first to tell you that we really do not know enough facts to determine now what are the specific rules we want to have there.

That is why I keep returning, and it may be repetitious, saying, "Let us start with first things first." The President is convinced and the Secretary of State is convinced that the first thing to start on in outer space is to be sure that it is good for peaceful purposes only.

Mr. CURTIS. One further question, Mr. Chairman. We have been talking on the negative aspects of this, banning national claims to outer space.

The affirmative line of approach would be to favor international control of outer space. I know there is a lot of controversy about one world and world federation. But I heard it seriously advanced in the 1940's that a new level of government, international government, should control the gateways to the seven seas.

If there is any place that is appropriate for international control, is not outer space a pretty appropriate place to consider that sort of approach?

Mr. BECKER. That may prove to be the case. But, again, we are working toward international cooperation in that field. We are not sure of the type of international control that you want there.

Let me suggest one thing just off the top of my head. There are tremendous opportunities for mankind in the exploration of outer space. There are a number of nations which today have no capability of any kind in contributing to that exploration. If you were offhand to say that the whole thing were to be handed over to international control, one cannot be entirely certain that there would not be a veto on the further exploration of outer space on the part of some of these nations.

Again, I think you have to think it through and say, "Who is to control and what will they do with it?"

Mr. BURLESON. Thank you, Mr. Curtis. If there is nothing else, we will hear Mr. Dechert of the Defense Department. Thank you very much, Mr. Becker, for your assistance.

STATEMENT OF HON. ROBERT DECHERT, GENERAL COUNSEL, DEPARTMENT OF DEFENSE

Mr. DECHERT. The Department of Defense, Mr. Chairman, appreciates the opportunity to have a representative here to speak on this important House concurrent resolution.

As the representative of the Defense Department I am glad to speak on this subject, which is of such vital importance today and which has such vital implications for the future.

I have a two-page statement which I will present for the record. Perhaps, because of the hour, I can simply say that the Department of Defense wholly agrees with the high aspirations indicated in the resolution here under consideration.

Mr. BURLESON. Without objection, the statement will be made a part of the record.

(The statement referred to is as follows:)

STATEMENT OF HON. ROBERT DECHERT, GENERAL COUNSEL, DEPARTMENT OF DEFENSE

Mr. Chairman, members of the committee, the Department of Defense appreciates this opportunity to appear before your committee which is today considering House Concurrent Resolution 326. As the Department representative, I am glad to speak on a subject which is of such vital importance today and which has such vital implications for the future.

The resolution expresses the hope that the United States and all nations of the world will join together in the peaceful exploration of outer space, to the end that all mankind may benefit from the unlocking of the multitude of secrets that encompass our world.

Further, the resolution urges that an agreement among the nations should ban the use of outer space for military purposes and that, by agreement or otherwise, the nations should establish a method to solve, by legal rather than by military means, disputes which might arise with respect to outer space.

As man puts his hand outward into space, first in groping fashion but ultimately with the intense study with which he has already examined to certain depths the earth and the water, it is wise that his search and his conquest be accompanied by the realization that the ultimate good must rest in peaceful exploration and use. The history of man's exploration of the land and the sea has unfortunately too often been a history of war, as nations have sought to claim sovereignty in those fields.

It is for this reason that the Department of Defense concurs in affirming the high ideals expressed in the resolution.

Yet, because this Department is mindful of the great military potential of outer space, we must condition our concurrence upon the need for adequate safeguards, including inspections, to insure that outer space is not used by anyone as a means for military aggrandizement.

This matter of safeguards is not a simple thing. The rocket that boosts a satellite into outer space with minor alterations can be a rocket that carries warheads around the globe. The satellite that circles the earth gathering scientific data can be a satellite that carries all sorts of military weapons. Unlike the manned airplane or the merchant ship which require great modifications for use as a military weapon, these rockets and these satellites are not structurally so different as between their military or their peaceful role. Thus the problem of absolutely insuring their peaceful use only is great. This difficulty should not deter us in our efforts jointly to find a solution, for the potential harm from uncontrolled military use of space is vastly greater.

Further, we must condition our concurrence upon the need to continue to develop military weapon systems for outer space until such time as adequate safeguards can be established to make absolutely certain that others cannot do what we relinquish the right to do. It is clear that outer space can play an important part in the military defense of a nation. If we should fail to comprehend this obvious fact and should stop our development of military weapon systems for outer space before insuring that all the nations of the world likewise stop, we invite disaster to ourselves and to the other nations of the free world.

Thus, we are faced by two major problems: first, we must say that this vast area of our universe is not to become the battleground for future generations providing completely adequate safeguards to insure such an aim; and second, until such time as that goal is achieved with certainty, we must continue to develop defensive weapons and vehicles which will meet this new threat.

Mr. DECHERT. We are, of course, aware of the complicated problems involved in establishing an effective means of control in this field of space, to insure nonmilitary use.

One complicated aspect of the problem is the extreme difficulty of distinguishing between things that are being prepared for peaceful uses and things that are being prepared for warlike use.

Another very difficult problem is the problem of actually policing a matter of this kind.

In the light of these problems and in the light of the fact that it is going to take time to reach the goal of these aspirations, we in the Defense Department, being charged with the defense of the country, and being very much aware of the fact that the defense of the country can be heavily jeopardized in the interval by someone else using space for military purposes against us or against others who are attempting to defend the free world and the protection of rights of the individual, believe that it is essential that, until this goal of an international agreement is reached and until effective machinery is established, we should not be hampered in going ahead with preparation for the defense of the country.

We hope that such an effective international agreement may be reached very quickly, as proposed before this committee.

Mr. BURLESON. You do support House Concurrent Resolution 326?

Mr. DECHERT. The Defense Department wholly endorses this resolution, and I have authority to speak for the Department on this point.

Mr. BURLESON. Do you have any language changes to suggest?

Mr. DECHERT. We have no objection or suggestion with respect to any language.

Mr. BURLESON. Mrs. Bolton?

Mrs. BOLTON. I have no questions, Mr. Chairman.

Mr. BURLESON. Mr. Fountain?

Mrs. BOLTON. Would you yield just a minute? In the beginning Mr. McCormack said it would depend on honest agreements and honorable agreements made in good faith. Are we going to assume that this other power is going to make honest agreements of good faith? Is that part of the thinking of the Department?

Mr. DECHERT. I think that is beyond the scope of my ability to testify. My testimony is that until we are assured that we have an effective means of enforcing the agreement, we had better not relax our defense of the country.

How we can make such an agreement effective is another problem. It is one of the things toward which this resolution looks.

Mr. BURLESON. That is a good question and a good answer. Mr. Fountain.

Mr. FOUNTAIN. In your opinion, would it hurt the resolution to eliminate the words in line 1, page 2, "and should strive to reach the moon and the planets in the years ahead"; strike that, and then you have the two positive propositions, establishment of plans for peaceful exploration of outer space, and then we could add the words, "ban the use of outer space for military aggrandizement, rather than the expropriation of other worlds for the benefit of one nation or group of nations."

Is there some purpose, political or otherwise, in having that language, "reach the moon and the planets"?

Mr. DECHERT. I know no reason for having it in the resolution.

I think we in the Department of Defense would have no feeling as to whether it should be left in or should be taken out, as you suggest. I think it was inserted with the idea of indicating that there was an aspiration to reach out and learn the secrets of space, to learn them for the good of all mankind.

My own thinking was that it was intended to indicate that this might be done either by a joint effort or by the individual effort of one of those countries who could afford to do it effectively, but that in the latter case the individual effort ought to be done under a joint supervision and control.

Mr. FOUNTAIN. Also, if we say, "reach the moon and the planets in the years ahead," it might be construed as an indication that we are far behind when in fact we may be within a year or so of doing it?

Mr. DECHERT. I cannot give the data as to when we may reach it. I am sure the Russians and we both have that in contemplation. I do not myself know how soon either we or the Russians may be able to do it.

There is, of course, a difference between reaching the moon in the sense of having something hit the moon, and reaching the moon in the sense of having someone land on it.

Mr. BURLESON. Mr. Dechert, thank you very much.

Mrs. BOLTON. I read in the paper that China was moving into the nuclear areas. I think she cannot be forgotten in the discussions that we have in our committee. Once the Chinese move, believe me, they are going to move.

Mr. BURLESON. Mr. Dechert, thank you again, and thank you all for coming. If the members will remain a few minutes, we will go into executive session.

(Whereupon, at 12:40 p. m., the subcommittee proceeded in executive session.)